

WHAT IS CLAIMED IS:

1 1. A computer-implemented method for managing information
2 relating to processing of polymer probe arrays, said method comprising the steps
3 of:

4 creating an electronically-stored experiment table, said experiment
5 table storing a record for an experiment, said experiment record comprising:

6 a first identifier identifying a target sample applied to a
7 polymer probe array chip in said experiment;

8 a second identifier identifying said polymer probe array chip
9 to which said target sample was applied in said experiment; and

10 creating an electronically-stored chip table, said chip table storing a
11 record for said polymer probe array chip, said chip record comprising:

12 said second identifier identifying said polymer probe array
13 chip; and

14 a third identifier specifying a layout of polymer probes on
15 said polymer probe array chip.

1 2. The method of claim A1 further comprising the step of:
2 performing an experiment wherein said target sample is applied to
3 said polymer probe array chip.

1 3. The method of claim A1 further comprising the steps of:
2 creating an electronically-stored target table, said target table storing
3 a record for said target sample, said target sample record comprising:
4 said first identifier identifying said target sample; and
5 a fourth identifier specifying parameters of preparation of
6 said target sample.

1 4. The method of claim A1 wherein said polymer probe array
2 chip comprises an oligonucleotide array chip.

1 5. A computer-implemented method for managing information
2 relating to processing of oligonucleotide probe arrays, said method comprising the
3 steps of:

4 creating an electronically stored analysis table, said analysis table
5 listing for each of a plurality of expression analysis operations:

6 a first identifier specifying a particular analysis operation

7 a second identifier specifying oligonucleotide array

8 processing result information on which said particular expression analysis
9 operation has been performed; and

10 creating an electronically stored gene expression result table, said
11 gene expression result table listing for each of selected ones of said plurality of
12 analysis operations, a list of genes or expressed sequence tags and results of said
13 particular expression analysis operation as applied to each of said genes or
14 expressed sequence tags.

1 6. A computer-implemented method for managing information
2 relating to processing of polymer probe arrays, said method comprising the steps
3 of:

4 storing in an electronically-stored experiment table for each of a
5 plurality of experiments, a first identifier identifying a target sample applied to an
6 polymer probe array chip in a particular experiment;

7 storing in said electronically-stored experiment table for each of said
8 plurality of experiments a second identifier identifying said polymer probe array
9 chip to which said target sample was applied in said particular experiment;

10 storing in an electronically-stored chip table for each of a plurality
11 of polymer probe array chips, said second identifier identifying a particular
12 polymer probe array chip; and

13 storing in said electronically-stored chip table for each of said
14 plurality of polymer probe arrays chips a third identifier specifying a layout of
15 polymer probes on said polymer probe array chip.

1 7. The method of claim 6 further comprising the steps of:
2 storing in an electronically-stored target table, for each of a plurality
3 of target samples, said first identifier identifying a particular target sample; and
4 storing in said electronically-stored target table, for each of said
5 plurality of target samples, a fourth identifier specifying parameters of preparation
6 of said particular target sample.

1 8. The method of claim 6 wherein said polymer probe array
2 chip comprises an oligonucleotide array chip.

1 9. A computer-readable storage medium having stored thereon:
2 code for creating an electronically-stored experiment table, said
3 experiment table listing for each of a plurality of experiments:
4 a first identifier identifying a target sample applied to an
5 oligonucleotide array chip in a particular experiment;
6 a second identifier identifying said oligonucleotide array chip to
7 which said target sample was applied in said particular experiment; and
8 code for creating an electronically-stored chip table, said chip table
9 listing for each of a plurality of oligonucleotide array chips:
10 said second identifier identifying said particular
11 oligonucleotide array chip; and
12 a third identifier specifying a layout of oligonucleotide
13 probes on said particular oligonucleotide array chip.

1 10. The computer-readable storage medium of claim 9 having
2 further stored thereon:
3 code for creating an electronically-stored target table, said target
4 table listing records comprising:
5 said first identifier identifying said target sample for one or
6 more of said plurality of experiments; and
7 a fourth identifier specifying parameters of preparation of
8 said target sample for one or more of said plurality of experiments.

1 11. A computer-readable storage medium having stored thereon:
2 an electronically-stored experiment table, said experiment table
3 listing for each of a plurality of experiments:
4 a first identifier identifying a target sample applied to an
5 oligonucleotide array chip in a particular experiment;
6 a second identifier identifying said oligonucleotide array chip to
7 which said target sample was applied in said particular experiment; and
8 an electronically-stored chip table, said chip table listing for each of
9 a plurality of oligonucleotide array chips:
10 said second identifier identifying a particular oligonucleotide
11 array chip; and
12 a third identifier specifying a layout of oligonucleotide
13 probes on said particular oligonucleotide array chip.

1 12. A computer-readable storage medium for managing
2 information relating to processing of oligonucleotide arrays, said storage medium
3 having stored thereon:
4 code for creating an electronically stored analysis table, said
5 analysis table listing for each of a plurality of expression analysis operations:
6 a first identifier specifying a particular analysis operation
7 a second identifier specifying oligonucleotide array
8 processing result information on which said particular expression analysis
9 operation has been performed; and
10 code for creating an electronically stored gene expression result
11 table, said gene expression result table listing for each of selected ones of said
12 plurality of analysis operations, a list of genes and results of said particular
13 expression analysis operation as applied to each of said genes.

1 13. A computer readable storage medium having stored thereon:
2 an analysis table, said analysis table listing for each of a plurality of
3 expression analysis operations:
4 a first identifier specifying a particular analysis operation
5 a second identifier specifying oligonucleotide array
6 processing result information on which said particular expression analysis
7 operation has been performed; and
8 a gene expression result table, said gene expression result table
9 listing for each of selected ones of said plurality of analysis operations, a list of
10 genes and results of said particular expression analysis operation as applied to each
11 of said genes.

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